(51) International Patent Classification[7]: G06F 9/50

(21) International Application Number: PCT/US01/15132

(22) International Filing Date: 9 May 2001 (09.05.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/202,975	9 May 2000 (09.05.2000)	US
60/208,011	26 May 2000 (26.05.2000)	US
60/209,430	2 June 2000 (02.06.2000)	US
60/209,140	2 June 2000 (02.06.2000)	US
60/209,525	5 June 2000 (05.06.2000)	US
09/663,564	15 September 2000 (15.09.2000)	US

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European

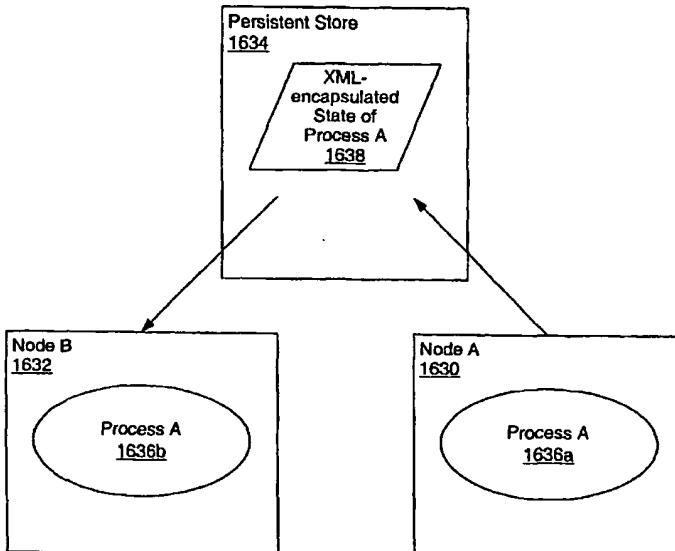(54) Title: MIGRATING PROCESSES USING DATA REPRESENTATION LANGUAGE REPRESENTATIONS OF THE PROCESSES IN A DISTRIBUTED COMPUTING ENVIRONMENT

(57) Abstract: A data representation language representation of the state of a process executing on a client or service in a distributed computing environment may be created. The representation may include a computation state of the device and/or virtual machine on which the process is executing, wherein the computation state of the device and/or virtual machine comprises information about the execution state of the process on the device and/or virtual machine. A process state may include, but is not limited to: threads, all objects referenced by the threads, transient variables created during the execution of the process, objects and their data, etc. In one embodiment, data describing one or more leases representing grants of access to external services, obtained from spaces by the process, may also be stored with the process state. The data representation language representation of the state of a process may be moved from node to node within the distributed computing environment. The representation of the state of a process may also be stored as a data representation language object in a store mechanism, and later retrieved from the store mechanism to resume the process execution on the same node or on a different node in the distributed computing environment. In one embodiment, an object compilation/decompilation process may be used in creating the representation of the state of a process and in regenerating the state of the process by decompiling the representation of the state of the process.

patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(88) Date of publication of the international search report:
13 March 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7   G06F9/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7   G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	GB 2 332 288 A (NORTHERN TELECOM LTD) 16 June 1999 (1999-06-16) page 30, line 28 -page 31, line 12 page 38, line 4 -page 39, line 13 ---	1,5, 18-21, 26,51, 54, 60-64,66
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[X] Further documents are listed in the continuation of box C.   [X] Patent family members are listed in annex.

Date of the actual completion of the international search	Date of mailing of the international search report
28 August 2002	21/11/2002

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Michel, T

INTERNATIONAL SEARCH REPORT

Ir ional Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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